László Z. Karvalics: Information Society Visions: from the early utopies to the adequate government-level strategic planning methods
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Abstract: Information society: what does it mean today? We need some meaning-archeological considerations to jump from the early information society definitions to the nowadays information strategies. *"Information strategy"* (or *"Information Society Development Program"* or simply *"IT-policy")* as an emerging entity of Government-level strategic planning combines and integrates the former sectoral policies - a library-based information policy, the information technology industry development, the cultural, educational and scientific policies etc. The "Vision" character as a focus-point of the planning method was born in the late 70's in biggest (multinational) companies, as a new alignment with the latest generation of strategic information systems. The political sphere has adapted this solution from the management science, and have built into his planning methodology.

Key Words: Information Society, Information Strategy

1. "Information society" – meaning-archeological considerations

When the idea of "information society" is mentioned in a certain context, it is very difficult to construe it, as this expression, which was relatively unambiguous earlier, has become extremely complex, varied and polysemic during the previous years. The effects of the rapidly spreading new technologies (primarily the Internet), that are quite obvious, elicit great attention and change activities and communities, have much greater influence on the use of this expression than the sociologic schools having constructed it. Altogether, it turns out again and again that the theory historical tradition of the "information society" is alive and effective, and always appears in different genres showing surprising transformations. However, even this theory historical tradition is not unified, there are at least half a dozen rival explanations sticked together in it: to make a conceptually clear situation, these must be separated. The problem is impeded by the fact that the "classical" concepts often choose very different collocations, still these expressions: information revolution, information age, l'informatization/computerization de société, information-oriented society or "cybersociety", etc. have a similar meaning.

1.1 Theory-historical precursors

Dordick and Wang (1993) have stated it several times that it was Tadao Umesao, professor of the Kyoto University, who, after having had experienced the economic headway

of the information sector, first predicted the birth of the "information society". Still, according to Marien (1996), the use of the term became general only at the end of the 70s, also in Japan. This was the beginning of the sociological adventure which, in 35 years, produced at least half a dozen approaches that are of nearly the same value and partly based on each other, but are of different sources. After Kling (1994), the most well-known authors are, according to their trend, usually described as "utopists", "antiutopists" or "empirically anchored". However, the division of tradition into the groups of enthusiasts and critics, and the survey based on the differences assigned to the size and importance of the changes (how big a transition?) seems totally insufficient to apprehend the basic types of the contemplation sources – even if the otherwise excellent and profound Marien (1996) takes it as the basis of his big outline of the professional literature.

Thus in the following we will introduce the most important trends sketchily and according to their methodological-professional positions, in the same structure and on the basis of the validity "radius" of their characteristics and statements.

1.1.1 "Information society" as a new industrial dominance-position – descriptive economic classification

"The information society started existing in 1956 and 1957…. (This was) the end of the industrial era…." – Naisbitt says (1982). He builds his statement on two "border stones": in 1956, the number of those employed in the information spheres exceeded the magic 50% rate, and the Russians launched "the missing technological catalysator of the information society", the Sputnik in 1957. Where Naisbitt is original, he is irresponsible, and where he is responsible, he is not original: while the highlighting of the Sputnik-phase is indefensible for several reasons, the economy statistical data drawing the attention to the change of sector dominance had been produced in the professional literature for 20 years by then. The most important authors in this topic were Umesao, Machlup (1962) and Porat (1977). Although this point of view opened a professional way through mainly to "information economy" and "knowledge economy", its lessons have regularly been taken as the realization of the "information society". Accordingly, from this point of view, first the United States and soon after that Japan and the other developed countries have been par excellence "information

societies" for at least forty years. (It was exactly 20 years ago, in 1978, when the American-Japanese invitational conferencel, the main aim of which was the comparison of the experiences accumulated by the information societies of the two countries, was organized in Seattle, at Washington University (Edelstein-Bowes-Hassel, 1978).

1.1.2. "Information society" as a post-industrial substance – the economy and the society approached from a comprehensive, normative political change of paradigm

In the analysis of Daniel Bell (1973, 1976, 1980) the change of the structure in industry is merely a part of an even more comprehensive group of changes. This also includes the process in which the traditional resources (land, capital, work) will be replaced by information and knowledge, and in case these transformations fulfil certain conditions, it may be possible to arrive at the "information society" within 20 years. With the realization of the two main conditions (with the help of communication technology science as collective good should be the main power of the society, and the technologies should get rid of their imperative nature) a new situation may arise: instead of the society nested into the economy it will be the economy that operates for the sake of the social aims. Bell and his adherents desrcibed the political-decision making and political-filosofical frames of this process.

1.1.3. "Information society" as a social image and ideal based on the analysis of trends and serving understanding and strategic planning – anthropological prognostics

The new quality of the most comprehensive problems of social history, the world of communities, cognition, everyday activities, the structure of assets and the relation with the environment dissolving in the birth of the "information society" as the future situation designable from the current trends with logic extrapolations – this is the summary of the impressive works of Alvin and Heidi Toffler (1981) and Yoneji Masuda (1980, 1990), which popularized the idea of "information society" in perhaps the greatest size of edition, and in opposition to which – because they were "utopies" and "spectacular futurological hokey-pokies – a "critical" trend was established quite rapidly (Roszak, Haywood, Postman, Gergen, Birkerts, Poll, Brook and Boal, Klapp and others). But as it was not the justification of the

world historical change but the "positive" evaluation attached to it that the critics queried, actually they contributed to the deep analysis and the spread of the (perhaps methodologically unreasonable) converse about the "blessings" and the "dangers". Antropological prognostics defers the birth of the "information society" to the second half of the 21st century, but reckons it possible that the circumstances characterizing the future social conditions strengthen and become obvious gradually in the following years.

1.1.4. "Information society" as the apprehension of the appliers' world of the present and the near future – analysing pictures of the transforming social subsystems

How are the traditional political, company organizational, educational, cultural, entertainment and shopping habits changing and how have they changed during the spread of computers and the forming of the network culture? What problems are brought to the surface by the change of lifstyles, the transforming (data) security environment and the investigation of the new community forms? There are dozens of "boom-surveys" having a predilection in using the expression of "information society" and possessing a plain and publicistic style that have been written to answer these very important questions. These have either tried to flash socially relevant questions for the experts of information technology, or have offered an "introduction" of "the results reached in the information-communication technology which dominates our lives more and more" and the further facilities of development for the general public. (They are common in starting with a bombastic opening chapter and generally continuing with the organizing survey of educational or PC-course level items.)

1.1.5. "Information society" as policy – the hybris of social planning

After the American and Japanese models and the publishing of the first group of basic studies dealing with the "information society", several social scientific trends have set off from the assumption that the structural change in the economy, the new generations of technology and the political want together may make the transfromation into "information society" a triumphal march of social planning. The further the technology is, the closer (social) policy gets. The Australians were interested in the dynamics of their "information

society" already in the middle of the 70s (Barnes-Lamberton, 1976), the Koreans, according to Lee and Han (1988), arrived at the "threshold" of the "information society" by the 80s, according to Cordell (1985) the 80s were the time of the transition into the Canadian "information society", and ten years ago Katz (1988) tried to give an international cyclorama of the "information society". However, while these studies – stepping over the industrial dominance – wished or stated the change of the comprehensive social quality, they seemed more and more anacronistic because of the apparently unchanging political-business status quo. Still this traditon is nothing else but a solution applying the definitions based on economic sector-dominance in the socio-political field.

1.1.6. "Information society" as the focus of a social synthesis – from the indepth analysis of the changing reality to the scientific-teleologic abstraction

It is widely known that the Japanese development campaign started in connection with the fifth-generation computers (Moto-Oka, 1982) is now considered a total failure by all (Pollack, 1992), but there was a coherent science systemic "destination model" in the background of the program which envisaged the computer of new principles and capacities as the "pandant" of a comprehensive, synthetising knowledge science. The unsuccessful being of the project did not disturb the even more consequent application of the (social) scientific assumptions, only the "epicentre" of this way of thinking was replaced to North-America (to the MIT and the Knowledge Science Institute in Canada. From this time, the point was not merely the fact that the phenomenon family of the "information society" wants scientific reflection, but the fact that the "information society" is a new, global way of operation of the knowledge and the science itself (Beniger, 1991, Stehr 1994). Castells (1996), too, stepping over the earlier (many times false and superficial) historical analogies, aims his big experiment at the embedment of the plenitude of changes into a summerizing scientific system model.

1.2. The completive creators of public opinion

In the past 20 years, beside the popular parts of the theory historical tradition, technological trend publicism (with consequences "occuring" behind a new invention stir or a development opening new horizonts) and the relating parts of science fiction (from the computerized-robot epic ancestors to the cyber-fantasy of incoherent genres), too, have contributed to the folklorization of the idea of "information society". It is important that sci-fi takes effect on two levels: beside the works dealing with the future of the artificial and natural intelligence, the (anti)utopies created with latent community philosophy and image of the man, which, practically in addition suggest possible development scenarios, repeating more and more banal and unresourceful patterns of attitude and operation, also influence the general public. The press looking for sensation and the everyday literature searching for fans have considerably contributed to the fact that the earlier dominant sociologic launchings and theory initiations today are only one of the discourse levels of the use of the "information society" expression, and fall more and more behind the other three. Its position is not likely to be strengthened by the fact that, from the global village (McLuhan) to the virtual community (Rheingold), several approaches and "bon mots" of the theory historical tradition have been transferred – applied at different rates and in various depths - into the genres dealing with the item of the "information society". On the contrary: with the folklorization, a part of the theories having been valid in the formerly strict context, has mixed irretrievably with the opinions of obscure origin dominating the public opinion pertinaciously.

2. "Information society" – the "genre" distribution of applications

2.1. The expression of "information society" today appears mainly in the headline and subhead jungles of the thematic supplements of the leading political-public dailies and the news and commentary world of the management-oriented magazines, in a setting practically totally decontextualized. "Information society", having lost its meaning almost completely, here is nothing more but the synonim of the world rich in information (technology), the substitute for "something in front of us". Its basic task is to counterpoise the advertisment mass demanded by the telecommunication, computer and information industry wanting more

and more advertisment with texts, and to awake the reader's interest at the same time. As a consequence of this, the "information society" means the long discussion of the fusion news in connection with the participants of the market, the correct educational introduction of the new technological solutions and results and the consequent treatment of the dilemmas of the "drawback", the "dangers" and the "extremities" at the same time. However, the role of the press is rather contradictious: it disposes the mass recognition of the real contents and scales of the cultural change, "puts" the issue of the "information society" into the common knowledge, but in many matters of detail it disorients the readers, and conceptually, it places the stress on the consumer aspect of the new methods.

2.2. While the freshest developments of the industry are being transferred, beside hardware and software technology, to information and knowledge management and content providing, a new type of lecture titles and presentaion works is appearing on professional conferences and events. They try to keep up with the "pretenders" through improving the importance of a text dealing with a technological detail that is interesting at most from a business or development respect by the use of the compound "… in the information society". This hypocritical-technocrate approach degrades the question of the information society to the level of linking methods, system specification and operational potencial growth, and so it gives its representatives the opportunity to keep and monopolize their official-bureaucratic positions having gained in the golden era of telecommunication and computer systems together with the decision preparing and making role that goes with their positions.

This is the base for the reasoning of those transforming technology into business, too. To increase the importance of their new product, method or service, they introduce them as clue technologies in the establishing of the "information society", whirling the interpretation of the "information society" very close to the meaning "the natural substance of IT- profit making". Because market competition is getting sharp, the market is growing and needs bigger and bigger participants, this approach jumps to a political level rapidly.

2.3. The platitudes of political marketing and the preambulae of the national information strategy programs define the "information society" from the tasks of the global market competition. There is a lot at stake for those on the top and those wishing to catch up, as well:

the IDRC (International Development Research Centre) states in its report from 1996, that "in the coming 25 years nine(!) of the currently fifteen leader economies of the world will fall back to the level of the developing economies because they won't be able to assimilate the knowledge and know-hows needed for the new communication environment". According to many, this is a challenge similar to the replacement of the trade lines from the Mediterranian-sea to the Atlantic-ocean some centuries ago. But as the main resource is "producable", and the process – exactly owing to information technology – is not related to space, there is an opportunity to get into the central drift. Therefore for the certain nations the stake is even bigger than it is for the multinational companies: this is the reason for the fact that the hardest lessons appear on political and regional federal level – for instance in Europe where the challenge is interpreted specificly, and where the answer to the "information superhighway", which promotes the improvement of the international competitiveness of the American companies to be a political idiom and program, is the series of action of the European Information Society, while on G7-level the slogan of "global information society" hides scenarios of the disribution of the profit expected from the increasing liberalization of the ICT-market. The "information society"- cathegory of the political cant represents the "information society"-position as a consequence expected from the consistent realization of a world market competition strategy, and not as a political priority attached to an alignment point which has been created to help the approach of a social state. Doing so, it finally separates from the theory historical tradition of the "information society", because it applies either its dispassionate approaches based on sector dominance and the humanitarian, passionate approaches thinking in community and human quality nearly exclusively for argumentative-demonstrative purposes.

2.4. In the scientific sphere, the theory-historical tradition actually impedes the clear appearance of the idea of the "information society", because the historiographic-retrospective outlines consider the different interpretations as peaks and slopes of the same theoretical way. And while the general meaning of the "information society" defined with strict scolar precision and the indication of its "digit" is being retard, the 90s have brought the analysises of monographic character of the detail-phenomena of the "information society" (education, politics, the network world, business, entertainment and the media). Beside the journal of the

topic, the Information Society, its exclusive "gazette", the I-way and its critical-sociologic "consience", the Terminal, there are different research programs at universities and social approaches dealing with the topic, only about half a dozen relevant books and some dozens of relevant articles published in each year.

Meanwhile, "science" is getting divided in a great extent. The folklorization of the meaning of "information society" and its replacement from the scientific sphere to the devil's kitchen of mass communication have resulted in the fact that the former expression has irretrievably been "leached". The contrast between the wish to say something big with the use of "information society" and the reality has become too big. Consequently, those drawing up a positive scenario with their own "information society" concept, appear, in the eyes of the representatives of the sceptic trend, as apologets of market liberalism and of those expecting profit from the "information society". The disputants deserving a better lot are fighting their unfruitful battles, and they are only assisting to the weakening of the opinion- and publicity-forming strength of the scholar community.

3. The displacement of the interpretation stresses of the "information society" idea (summary)

According to the above we may, with little complement, summarize the main moments of the approximately 25 years long idea history of the "information society:

- from social science that is precarious conceptually but accurate in its exposition, it has gradually been transferred into the incoherent political-public use, in an almost dominant role by today

- the places of the respects of the (information-communication) technologies are taken more and more by the practice-oriented world of knowledge and knowledge industry, making the various forms of education the clue question of the "information society" (sometimes even a national safety priority)

- the "pioneer" "information societies" are being replaced more and more by the idea of the "global information society"

- the informatization serving the human and society ideal, the world of values and the society development is replaced by the rough competition-policy and the investigation of the consequences of the measures wanted by competition. After the community- and life style- oriented experiments of the early development programs, the national information strategies of the end of the decade are aimed at the improvement of competitiveness

- the comprehensive planning methods of the nations rising above the daily business processes are taken by the strategic methodology imported from the means depot of the multinational companies

The field being the most interesting from a professional point of view includes undoubtfully the coherent "information society"-buliding programs of the national and regional coalitions, the so-called "information strategies". Their integrating role is clearly proved by the fact that politics employs the results of social sciences and sociologists as professional screens in certain policy-processes, and rely on them as propagators in political marketing. In the following we will investigate this sphere, the world of information strategies.

4. Information strategies: an "information society" being under construction

"Information strategy" means the new quality, having appeared at the beginning of the 90s, of political planning of various levels (national or international-regional-federal). The character discerning information strategy from its progenitors is that information strategy raises the development of information infrastructure, the informatization of certain subsystems of the society and information industry development policy (IT-industry policy) from their sectoral functions, and by uniting these it makes a homogenous base for long-term planning, now, after the former "coordinative" relation and as a central participant, adjusting the main

segments of education policy, the development of telecommunication, science policy and the economy of human resources to its own targets and tasks.

Since the introduction of "the father of all information strategy programs", the Singaporian "Intelligent Island" program started in 1992 (A Vision of an Intelligent Island. IT 2000 report) approximately 30 programs have been born on a national scale. Instead of the short description of each, I will now give a comparative introduction of them considering formal and content respects.

The countries have approached their information strategies in two different ways. Either they have "grown over" or expanded from the traditional informatic industry development or computerization programs (and the institutions managing these), or they have come to life as independent, new developments on governmental (typically on finance department) initiatives. The first model is more typical in Asia, and the second in Europe, together with its advantages and disadvantages. Namely, the "Asian model" follows its way organically, it does not need new institutions, but because of the technology-related operative planning the representation of social respects, the synthesis may be omitted (for instance in Malaysia, the responsible manager of information strategy is now MIMOS which continues microelectronical researches, and has developed a small department employing only economists, but the respects of social planning have failed to become institutional up to this day.) In the European model, that comissions coordination to the market instead of the governmental organs, and starts information strategy in a monetarist view, the traditional sectoral borders are much more preserved, although the comprehensive moments are weaker. Anyway, the information strategies of the otherwise rather far countries have several common characteristics.

The information strategies are elaborated to very different rates. There are dozens of satellite-program pamphlets revolving around the Canadian basic documents of book extent, beside the comprehensive Finnish program there has been a strategy of the same extent made regarding only the educational system, while the Polish or Philippinean basic texts are of hardly bigger extent than some pages. Similarly, there is big "dispersion of genres": the Japanese plans are worked out precisely and their tasks are portioned into annual periods, while the Australian strategy is content with the elaboration of four possible development scenarios, and beside the recommendation-like analysises (for instance Gerard Théry's

"Report" treated as an information strategy in France), there are countries planning execution in almost military discipline (e.g. South-Korea). Some nations make plans for only five years (until about the end of the millenary) (Vietnam, Norway), some take aim at 2015 (Japan) or 2020 (Malaysia).

Concerning contents, the central moment is the establishment of the national information infrastructure (NII) and within that the governmental information infrastructure, as it is the starting development enabling all conceptions at social level. Because of the substantial identity of technology, the national characteristics can hardly appear in the programs which outline the IT-opportunities of health care, education, research-development and the other fields in a routine or homework manner. The "teleologic moment", which takes these only as instruments in the realization of its comprehensive vision, appears rarely. Japan actually aims at a change of the culture with its program of an "intelectually creative society", Malaysia wishes to join the most developed countries by means of its grand developments, others believe to find the perspective in the creation of the new quality of "welfare".

The direct aims are relatively plain: creation of jobs, reduction of expenses, improvement of efficiency, better operational methods, bigger publicity, more satisfied citizen. Mainly similar tasks arise from these, without any priorities: standardization, integration, implementation. In the starting of local experiments and pilot projects, the governments generally rely on the impulsion of private capital and local resources.

5. Types, preliminaries, initiatives and future of the information strategies (Typological and approach-division respects to a systematic analysis)

The comparative analysis of the information strategies is in its childhood. In this chapter we wish to survey the possible aspects of investigation hoping that it will be feasible to make the proposed typologies and categories suitable for analysing comparisons. Although several magnificient aspects have been "produced" in the professional literature (like Jarvanpaa's model of the governmental contribution-types in informatization, the regulation/influence and supply push/demand pull matrix), but the systematic survey is still missing. This must be carried on parallel with the monographic revelation of the information

strategies of the countries considered typical (like Malaysia, which we have taken as an example).

5.1. Complete and Partial Information Strategies (Five criteria of the Complete Information Strategy)

1. Comprehensive, nation-wide basic document
2. Government-level coordination
3. Operative "office" for the "fulfilment"
4. Scientific background (institute, ad hoc committee, etc.)
5. Pilot projects

5.2. Types and features within the Complete Information Strategies

1. Premature information strategies (1971-1973)
2. National information strategies (1991-)
3. Regional trials (1995-)
4. MNC's Information Society Programs (1995-)
5. NGO's Information Strategies (1993-)
6. Others (1994-)

5.3. Fields of Information Strategy Pre-History

Education: Mass knowledge-production as strategic goal (1868-1997)
Science: The detonation (1930-1948) and the new lap (1958-1995)
Library, Documentation, Governments: The Dawn of Information Policy (1965-1986)
Industry: Programs for IT-Development (1967-1996)
Business: The (multinational) companies interlude (1981-1992)
Politics: Glittering and fall of the "Information Superhighway" (1993-1995)

5.4. The future of Information Strategies

1. The new role of the cultural heritage
2. The Bias of public/private efforts
3. Quality of life in the center
4. Combination of "information" and "green" aspects
5. Accelerating global standardization
6. Bigger and bigger cooperating sets
7. Turning back to the original meaning of Information Society
8. Looking for "transformability"

6. "Information Society" - the Malaysian Case

Ever since the theoretical theses of "the information society" were transferred into political programs, no more ambitious, no braver or more spectaculous conception of development, based on information technology, has been outlined than that of Malaysia with a population of 20 million. Beside Japan and the United States, which has been systematically growing for over twenty-five years, beside Canada and Australia, which are scrambling right after the former two on the information highway, beside Sweden, Denmark, Finland, France, and the United Kingdom, which expect to maintain their achievements through the quick adaptation of the worldwide latest inventions of the information industry, the new “little tiger” of South-East Asia is intending to emerge from its complete poverty as one of the fully developed countries - according to an action plan that is based on a monumental political dream called *Vision 2020.*

Malaysia provides a historical example of how to mix genuine ideas based on indigenous endowments and opportunities with the tasks of adaptation to the global trends, as well as how to adjust priorities on the way even more appropriate to the challenges of the moment. The information technology megaprojects (particularly the Multimedia Supercorridor), which have introduced Malaysia’s information strategy to the world, are rooted in a fabric in which human resources, educational industry, the industrial development

of information together with the equipping of the spheres of application with computering, produce a comprehensive political program.

Information technology policy development is an incremental process and therefore knowledge of its historical evolution is essential for understanding the decisional dynamics that lead to the current set of policies. The "Malaysian case" is condensing the *history of Information Society thinking.* Evocating it's *first period*, the "ideological" parts of the Vision 2020 are extremely similar to the first "info-utopies" (i.e. Masuda and others): human-centered, value-based, future-oriented, knowledge-focused. The "practical" arguments comes from the principles of international socio-economic competition, mirroring the *second period* (in which the information strategy for the developed world was a primary resource of their competitive edge). The "political message", the ultimate objective of the program is to become a fully developed country during the next 25 years (as can be seen in the *third period*, where for the developing countries information strategy is a chance to make the quantum leap into the 21st century).

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